



# BJ-T701 Intelligent Time controller

## User Manual

**Version: 1.1**





## Readme

**When you use BJ-T701 Intelligent Time controller, be sure to carefully read this user manual, and be able to fully understand the implications, the correct guidance of operations in accordance with user manual, which will help you make better use BJ-T701 Intelligent Time controller, and help to solve the various problems at the scene.**

1. Before the meter turning on the power supply, be sure that the power supply within the provisions of the controller;
2. When installation, the input terminals must Non-short circuit;
3. Be sure the controller wiring consistent with the internal system settings;



- Please read carefully before using this user manual
- Please save this document



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## 1. - SUMMARIZE

BJ-T701 Intelligent Time Controller, use the advanced microprocessor, high reliability, error is small, strong stability. With large-capacity relay, can replace control system, independently control street light

1. Arithmetic design is according to nation's geography and weather conditions, earth longitude and latitude and many other factors, such as longitude and latitude.
2. Solid shell design can adapt to the needs of different geographic environment
3. Can be used in lights, beacon lights, neon signs, advertising lights and other equipment need time controller.
4. It is also widely used in streets, railway, station, sea-route, mining, schools and power supply department.

## 2. - FEATURES

1. Arithmetic design is according to nation's geography and weather conditions, earth longitude and latitude and many other factors, such as longitude and latitude.
2. Embedded microprocessor, can be used as control unit
3. Solid shell design can adapt to the needs of different geographic environment
4. Use large capacity relay, can directly connected to the load
5. Widely used in streets, railway, station, sea-route, mining, schools and power supply department
6. Self calibration technology, keep stabilization
7. 0.39" height LED, prevent dazzle, highly visible display



### 3. - SPECIFICATIONS

Power supply	220V±30% 50HZ
Power consumption	≤ 1.8W
Display mode	4 digital LED
Minimum control time	1 min
Clock Accuracy	30S / Year
Relay output	1-route AC220V/20A (Resistive load)
Life expectancy	Mechanical 1,000,000,000 operations min
Protection (TH)	Anti-containing acid, alkali, salt gas
Ambient condition	Temperature: -45~70°C (-49~158°F)
	Relative humidity <93%, Non-condensing
Storage Environment	-10~55°C(14~131°F) ; 20 ~ 93%RH ; Noncondensing
Dimension	46 × 115 × 60 mm (1.82x4.53x2.37inch)
Weight	Approx 500g



## 4.- INSTALLATION

### 4.1. - Mounting

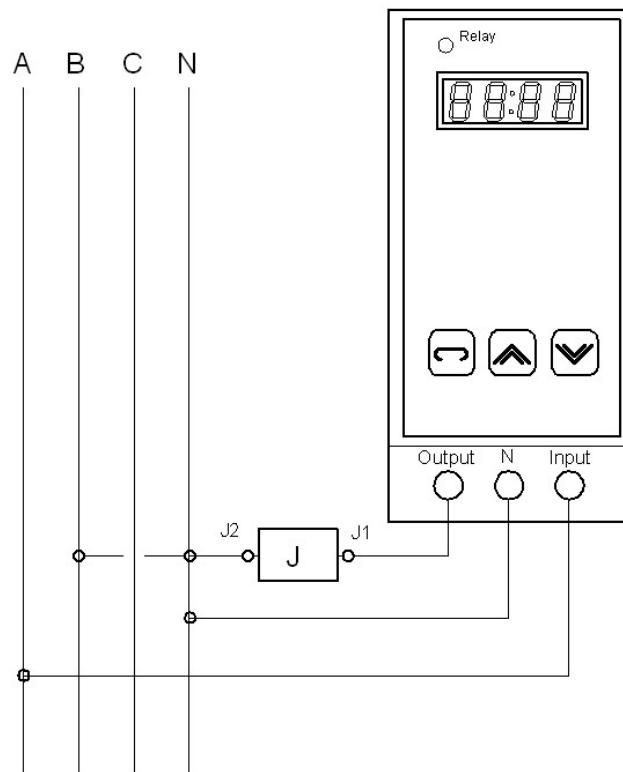
BJ-T701 time controller is wall mounting, or Horizontal placed in working location

#### Notes:

Please follow the work environment parameter on chapter 3. - SPECIFICATIONS

Please ensure there is enough space to place controller

### 4.2. - Connection drawing for the BJ-T 701



#### Notes:

1. Please connect the input pin to the A phase, neutral pin connect neutral line (N).
2. Since the time controller doesn't contain fuse, the input needs to connect a 1A fuse
3. If need to use an external relay, the output terminal should connect to relay pin J1, J2 should connect to N, (relay input is 220V); or J2 connect to B(C) phase, (relay input is 380V)



## 5. - OPERATION MODE



**Up key.** Press this key to increase values displayed on the display. Hold down this key to speed up the incremental action.



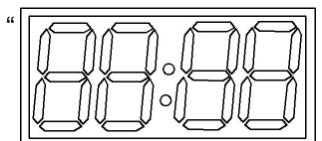
**Down key.** Press this key to decrease values displayed on the display. Hold down this key to speed up the decrements.



**Mode key.** Press this key to set parameters within each function mode.

The controller has one display, and a LED type indicator (red colour). It will be on according to the replay output status.

When the controller is powered up, the display shows



This is the recent time.



## 6. - SETUP PROCEDURE

The SETUP procedure of the BJ-T701 is performed by means of several SETUP options.  
Once into the SETUP, use the keyboard to select different options and enter required variables:

### 6.1. - Set time

Step	Display	Meaning	Adjust	Explanation	Value
1 Connect Power Supply		Time XXXX	Press	Press  ,display turn on time Press  ,display turn off time	
2 Press		Hour	Press	Set Hour	0~23
3 Press		Minute	Press	Set Minute	0~59
4 Press		Year	Press	Set Year	
5 Press		Month	Press	Set Month	1~12
6 Press		Date	Press	Set Date	1~31



## 6.2. - Choose the mode

Please follow the step 6 on chapter **6.1. - Set time**

Step	Display	Meaning	Adjust	Explanation	Value
7	Press	Control Mode	Press	Choose	

**Manual Mode**, user can set the turn on and turn off time

Please refer to the section **6.2.1 Manual mode setting**

Step	Display	Meaning	Adjust	Explanation	Value
7	Press	Control Mode	Press	Choose	

**Automatic Mode**, controller switch act depends on local latitude and longitude

Please refer to the section **6.2.2 Automatic mode setting**



### 6.2.1- Manual mode setting

Please follow Step 7 on chapter 6.2.1- Choose the mode

The display show:

Step	Display	Meaning	Adjust	Explanation	Value
8	Press	January Turn on ponit(hour)	Press	Set turn on value	0~24
9	Press	January Turn on ponit(minute)	Press	Set turn on value	0~59
10	Press	January Turn off ponit(hour)	Press	Set turn off value	0~24
11	Press	January Turn off ponit(minute)	Press	Set turn off value	0~59
	...				
	...				
	...				
52	Press	December Turn on ponit(hour)	Press	Set turn on value	0~24
53	Press	December Turn on ponit(minute)	Press	Set turn on value	0~59
54	Press	December Turn off ponit(hour)	Press	Set turn off value	0~24
55	Press	December Turn off ponit(minute)	Press	Set turn off value	0~59
56	Press	Test Item	Press	See the light bright or dark	



### 6.2.2- Automatic mode setting

Please follow the step 7 on chapter 6.2.1- Choose the mode

The display show:

Step	Display	Meaning	Adjust	Explanation	Value
8	Press ↻	Set Longitude	Press ⌂	Enter the local longitude data	71~140
9	Press ↻	Set latitude	Press ⌂	Enter the local latitude data	19~50
10A	Press ↻	ON:Control all night; OF:Control half night	Press ⌂	Choose	
11A	Press ↻	Adjust turn on time	Press ⌂	Based on the latitude and longitude control, adjust turn on time	-50~50
12A	Press ↻	Adjust turn off time	Press ⌂	Based on the latitude and longitude control, adjust time turn off light	-50~50
13A	Press ↻	Test Item	Press ⌂	See the light bright or dark	
14A	Press ↻	Time		Return to time	
10B	Press ↻	ON:Control all night; OF:Control half night	Press ⌂	Choose	
11B	Press ↻		Press ⌂	Adjust turn on value	-50~50
12B	Press ↻	Turn on point(Hour)	Press ⌂	Adjust turn off in value the night	00~23
13B	Press ↻	Turn on point(Minute)	Press ⌂		59
14B	Press ↻	Time	Press ⌂	Return to time	

**Note:** 1. Controller use the Hexadecimal number means the month:

1-9 means January to September

A, B, C means October, November, December

2. The longitude and latitude above (8 step and 9 step) are according to the ones of China, these can adjusted to the requirement.
3. Step 10A-18A is for **N mode**, computer control all night that user can adjust the turn on/off value.
4. Step 10B-14B is for **F mode**, Energy-saving mode, user can turn off the light in the midnight



## 7. - SAFETY CONSIDERATIONS



All installation specification described at the previous chapters named:  
**SPECIFICATIONS, INSTALLATION, OPERATION MODE, and SETUP PROCEDURE**

Note that with the controller powered on, the terminals could be dangerous to touch. This controller is factory-shipped at proper operation condition.

## 8. - MAINTENANCE

The BJ-T701 does not require any special maintenance. No adjustment, maintenance or repairing action should be done when the controller open and powered on, should those actions are essential, high-qualified operators must perform them.

Before any adjustment, replacement, maintenance or repairing operation carried out, the controller must be disconnected from any power supply source.

When any protection failure is suspected to exist, the controller must be immediately put out of service. The controller's design allows a quick replacement in case of any failure.

## 9. - TECHNICAL SERVICE

For any inquiry about the instrument performance or whether any failure happens, contact to Blue Jay's technical service.

*Blue Jay - After-sales service*

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